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Assassin Bugs

When working in the yard or garden, you may notice a rather fearsome looking creature crawling among foliage of shrubs or trees. The insect has a large (1-1.5 in.), brownish-grey body with a large beak folded under its head and an obvious semi-circular crest on it's back. Surely, this creature must serve some detrimental purpose in the garden. Actually, what you are seeing is an assassin bug; a beneficial insect predator.

The Wheel Bug, *Arilus cristatus* Photo by M. Redmer

Assassin bugs belong to a large family of true bugs called the Reduviidae. There are approximately 160 species in North America, and many are commonly encountered around the home. The group is exclusively predaceous and many feed on a wide variety of landscape and garden pests including the fall webworm, tent caterpillar, Mexican bean beetle, and June beetles. The majority of species are ambush predators, sitting motionless on foliage or slowly stalking prey. Many have body armament or cryptic coloration to provide camouflage, though some are attractively colored.

Like other true bugs, assassin bugs show gradual metamorphosis, having five immature or nymphal stages before becoming adults. Most species have only one generation per year. The eggs are laid in rows or clusters of 10-70 eggs on bark or plant leaves. The eggs have been described as "little wine flasks

Zelus luridus Photo by M. Blanford

Pselliopus barberi photo by M. Redmer

with a fancy stopper," and are cemented to the plants surface with their tops pointing up. They can easily be distinguished from the eggs of other groups by their distinctive flask-like shape and ornate, spined cap.

Though these insects are considered beneficial they should be treated with respect. Assassin bugs can deliver a painful bite if handled carelessly. The painful reaction is caused by the injection of toxic saliva. This saliva is used to immobilize and digest the internal organs of their insect prey.

As an interesting side note, one group, the kissing bugs are household pests in Mexico, Central, and South America. They live in cracks of walls and among the eaves of thatched roofs, coming out at night to feed on the blood of humans and their animals.

As it is with most situations, looks can be deceiving. Assassin bugs can provide a valuable service around the yard and garden if treated with respect. So, don't smash that bug.

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